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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,057

10/23/2006

Stephen John Kennedy

117-587 (AMK)

6279

23117 7590 05/25/2010
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EXAMINER

WATKINS III, WILLIAM P

ART UNIT

PAPER NUMBER

1783

MAIL DATE

DELIVERY MODE

05/25/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,057	Applicant(s) KENNEDY, STEPHEN JOHN	
	Examiner William P. Watkins III	Art Unit 1783	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett (U.S. 5,368,914) in view of Kennedy (U.S. 6,050,208).

Barrett teaches a structural laminate with two outer metal layers and a resin core with an intermediate reinforcement layer (see the abstract and element 20, col. 4, lines 20-30). The resin core maybe made of an elastomer (col. 4, lines 28-30). Barrett fails to explicitly teach a compact thermosetting resin or the injection and curing of such a resin between the face sheets. Kennedy teaches the use of a polyurethane thermosetting elastomer that is injected between two metal outer structural face sheets to form a resin core (col. 4, lines 35-50 and col. 5, lines 15-30). Kennedy also teaches the use of metal face sheets greater than 3mm in thickness in a structural laminate (col. 2, lines 35-50). The instant invention claims forming a laminate with a core and intermediate layer by injection molding thermosetting resin in to the core. It would have been obvious to one of ordinary skill in the art to have formed the core and sheets of Barrett by injection molding as this is taught as one of a limited number of ways to form such a laminate by Kennedy, and to use polyurethane as a specific elastomer resin as

Kennedy teaches this as a good elastomer resin. Use of any known laminate intermediate reinforcing layer such as a mesh or perforated sheet would have been within the ordinary skill of the art absent unexpected results. Adjusting the thickness of the outer structural layers for any given application would have been within the ordinary skill of the art.

3. Applicant's arguments filed 12 February 2010 have been fully considered but are not found to be persuasive.

Applicant argues that Barrett is a structural panel limited to aircraft that is an order of magnitude thinner than Kennedy. The examiner first notes that Barrett teaches application to structures such as airplanes that are exposed to vibration. The panel is not limited to airplanes. Ships such as those taught by Kennedy, which experience vibration, would also be a logical application of the panel of Barrett to one of ordinary skill in the structural panel art. Though the examples of Barrett are thinner than those of Kennedy, Barrett explicitly teaches that layer thickness varies with the specific application (col. 4, lines 5-15). The drawings of Barrett show the inner damping layer being several times thicker than the outer layers of the laminate, which would produce about a 15 mm core if the outer layer thicknesses of Kennedy, which are suitable for ships, are used.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Watkins III whose telephone number is 571-272-1503. The examiner works an increased flex time schedule, but can normally be reached Monday through Friday, 11:30 A.M. through 8:00 P.M. Eastern Time. The examiner returns all calls within one business day unless an extended absence is noted on his voice mail greeting.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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WW/ww
May 25, 2010

/William P. Watkins III/
Primary Examiner, Art Unit 1794